Approved For Release 2001/11/08 : CIA-RDP83T00573R0001000600099 i / 2003 to

# Administrative .- Internal Use Only

ODP 924-77 16 May 1977

MEMORANDUM FOR:

Chief, Information & Privacy Staff,

DDA

STATINTL

FROM

Executive Officer, ODP

SUBJECT

: Computer Application Possibly

Subject to the Privacy Act

As agreed, I am forwarding the attached descriptions and project proposals for two computer applications for the DCI. These projects are known as DCI Task I and DCI Task II. Both have records containing the names of U.S. citizens and these records can be retrieved by name. For your convenience, I have marked significant portions of the attachments in brackets. I believe I have informally discussed these projects with you and members of your staff. I now need your formal guidance for our records as to whether ODP or the customer office is required by the Privacy Act to do anything before putting these projects into operation.

STATINTL

Att: a/s

Distribution:

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1 - ODP Registry w/o att

1 - O/D/ODP file

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O/D/ODE ee/5-16-77

Approved For Release 2001/11/08 : CIA-RDP83T00573R000100060009-9

TASK 1 - AUTOMATION OF ADMIRAL TURNER'S PERSONAL DATA

## A. Description of Requirements

## STATINTL

This data currently resides on a disk pack which was part of an IBM 3 Model 10 configuration. The system contains approximately records. Each record contains data about individuals that Admiral Turner has had contact Examples of the fields in the record are name, address, type of association, official title, etc.. The user requirements which must be supported are:

- 1. Add, change, and delete any field from any record. This includes both the main file and associated index files.
- 2. Print output reports on demand.
- 3. Selective search of the file against any logical criteria. This differs from requirement #2 in the FORMATING specifications of output. Requirement #2 has specific rules. This one is more flexible.

## B. Discussion of Alternatives

## 1. Purchase of IBM 3 Model 10.

The current disk pack could be mounted on the IBM 3 and all existing software for this application would be operational. Additional work would be necessary for requirement #3 (selective search) which is not supportive on the current system. The file maintenance procedures (forms, key punch) would be similar to those in the existing system.

## 2. ODP On-line Facilities

All transactions would be entered from a terminal(s) located in the DCI area. The terminal would be connected to an ODP computer that supports on-line activity for many CIA users. The software is called GIMS. File maintenance activity (add, change, delete) would cause immediate changes to the data base. It would occur 10-15 seconds after the data was entered. Report production would be a two-step process. The data for the report would

be selected during the terminal session (2-4 minutes). A batch job would then be scheduled to produce the report in the ODP computer center (4-6 hours). Selective search of the file (requirement #3) is available at the terminal (2-4 minutes). The system will be available approximately 90% of the time.

## 3. ODP Batch Facility

All transactions would be entered from a terminal located in the DCI area. The terminal would be connected to an ODP computer that allows a user to COLLECT input transactions and output requests. These transactions would then be sent electronically to the ODP BATCH system for processing (4-6 hours). All output would appear on computer listings printed in the ODP computer center. This facility is appropriate if the 4-6 hour BATCH turn-around time is acceptable. The system will be available approximately 92% of the time.

## 4. Mini-computer Used for Other DCI Applications

If a mini-computer is selected for other DCI applications, this application could be placed on that mini-computer. The transaction load and input and output procedures could easily be accommodated. There would then be only one type of terminal in the area. The operational procedures would be similar to other applications running in the DCI area.

#### C. Estimates for Time and Costs

## 1. IBM 3 Model 10

Initial costs:

Purchase price \$35000 Software support (Req.#3) 3000

Total initial cost

\$38000

Time schedule:

Software development 3 weeks after procurement

## 2. ODP On-line Facilities

Initial costs:

Terminal	\$5000
Disk pack	300
Software development	3000

Initial total costs \$8300 Monthly computer costs 300

Time schedules:

Software development 3 weeks

## 3. ODP BATCH Facility

Initial costs:

Terminal Software development	5000 3000	
Initial total costs		8000
Monthly computer costs		100
Time schedule: 3 weeks		

# 4. Existing Mini-computer

Initial software development 4000 Time schedule: 4 weeks

ODP-628-77

5 April 1977

STATINTL MEMORANDUM FOR

Aide to Director of Central Intelligence

FROM

Deputy Chief, C Division/Office of Data Processing

SUBJECT

Project Proposal for TASK I

Attached is the Project Proposal covering the requirements, schedule, and costs for completing the work for TASK I.

Your concurrence is requested.

STATINTL

STATINTL

Date

## PROJECT PROPOSAL FOR

## TASK I

I.	HISTORY
II.	CURRENT SYSTEM
III.	REQUIREMENTS
IV.	PROPOSED SYSTEM
V.	DESIGNED CONSIDERATIONS
VI.	IMPACT
<b>11 T</b>	COST AND TIME ESTIMATES

## I. HISTORY

A meeting was held the week of 7 March 1977, to discuss the automation of activities for the Director of Central Intelligence (DCI). (Reference Attachment I).

Subsequent to this meeting, one of three alternatives was chosen to implement what will be referred to as TASK I for the DCI.

What follows is a brief proposal for the requirements and system for TASK I.

#### II. CURRENT SYSTEM

STATINTL

The original automation of the data file was accomplished on an IBM 3 model 10. Data was collected on cards and updates were made periodically to the system. There are approximately records on the file with a generated index number for each record. Typical add, change, and delete updates were available and two basic reports were output from the system on a 'request' or regular basis.

Some selective searching took place on the data fields. The queries were fairly specific and were not general purpose across the entire data file.

The data was stored on disk with approximately 750 characters of data per record with 37 fields.

It is not known whether editing on a field by field basis was performed and to what extent.

### III. REQUIREMENTS

The requirements of TASK I are almost identical to those of the current system. They are rather basic and straightforward.

- a. Provide a storage media for the data
- b. Provide update capability-ADD, CHANGE, DELETE
- c. Provide complete and selected file output on request
- d. Provide direct and ad-hoc query capability
- e. Provide all training of new system.

The updating requirements will not have a major impact on the system. It is expected that 20 transactions a month will be considered normal activity. Also, most field editing will be basic alpha-numeric, and range checks.

Query response was not considered a hard requirement. However, it is expected that response for direct queries by 'index number' would be 10-20 seconds, and that sequential searches by descriptive code would be about 2-5 minutes.

## IV. PROPOSED SYSTEM

As already described, we will take the current data file on disk and write a conversion program to copy from disk and load into GIMS.

One to three menu programs will be written to allow for updates on-line to the file.

Typical data flow for the system is as follows:

Data is received by the customer in the form of correspondence, notes, memos, and cards. This data is then analyzed, annotated and, when appropriate, will be entered by the customer on his terminal. Basic edits will be performed and the transaction will be accepted or rejected. If it is rejected, he will correct the error and re-enter the transaction.

On request, or at end of month, the customer will initiate a request for a complete listing of the file.

Access to the system will be determined by the customer. Typical GIMS availability is from 0700 to 1800, but this can be extended. The Data Access Center who monitors and has backup responsibility for the data bases is open 24 hours a day.

#### CONVERSION

A program will be written that will take the current file and reformat it into a suitable format for the new system under GIMS. Basic edits will be performed in conversion to insure alpha and numeric data as well as code validation. The file and related code dictionaries will be loaded into GIMS.

Once the data has been loaded and all necessary programs written and tested, and the customer will be requested to participate in user acceptance of the system. This will involve some basic GIMS training, evaluation of reports and updating capabilities, and satisfaction that the requirements have been met. The system will then be declared operational.

## V. DESIGN CONSIDERATION

Upon looking at the data and related codes, it may be necessary to generate some translate dictionaries (table look-up dictionaries) as a means of reacting to the coding structure of the data.

The index to the main file is not a required data element by the customer. In fact, it looks generated by the current system. It is used as a sequence control for reporting. Currently a four-digit number, it should be expanded to five for growth.

It will be necessary to index on the name field. This will be done on the whole name field or a part of it. It may be desirable to split the name field into last name and first name parts. However, as usual with name fields consistancy of format is difficult especially with multipart last names and seniors and juniors (SR.,JR.).

It may be necessary to communicate with the original designers of the current system in the event questions about the programs/data cannot be resolved.

Since this proposal only addresses TASK I, the remaining two tasks need to go through this analysis. It is anticipated that there may be some overlap on data and/or requirements between TASK I and TASK II. It may even be feasible for TASK I and TASK II to be stored in the same data base. In other words we will not design TASK II independent of TASK I.

## VI. IMPACT

There is no hardware impact because the terminal and communications line is now being worked on.

The impact to the customer will be allowing time for learning the new system, verifying that the requirements have been satisfied, and learning the GIMS software language.

# VI. COST AND TIME ESTIMATES

		H	OURS	TARGET	<u>r</u>	MANPOWER	COST	COMPUTER
a.	Conversion program	ì	40	15 Apr	c	600.00		200.00
b.	GIM menus/dictiona	ries	5	20 Ap	c	75.00		225.00
c.	Reports Program		5	20 Apr	c	75.00		225.00
d.	Testing/documentat	ion	40	26 Apr	r	600.00		300.00
e.	Training		16	28-29	Apr	250.00	•	200.00
f.	User Acceptance			6 May				
			•					
	,	rotal	Manpower	Cost		1,600.00		1,150.00
		rotal	Computer	Cost	,	1,150.00	.•	
			TOTA	L,	\$	2,750.00		

TASK 2 - LOG OF CONTACTS

## A. Description of Requirements

This system will record summaries of Admiral Turner's conversations for later retrieval. The input will contain: (1) participants in conversations; (2) key words of conversations; and (3) abstracts of conversation. Typical searches will be by name or key word. The response time to key word searches should be less than 30 seconds. Search of the abstract will occur infrequently and the elapsed time should be less than 30 minutes. The system should have nearly 100% availability without the cost of backup hardware.

## B. Discussion of Alternatives

In order to meet the high availability figure, a dedicated mini-computer should be used. Experience with terminals connected to a centralized service indicates that the system will have 90-95% availability. The mini-computer suggested for this application is the Microdata REALITY system. ODP recently participated in a study of mini-computers that solve this class of problem, and the REALITY system was chosen to be the standard.

The Executive Registry System (ERS) was built for the DCI in 1974. The specifications of the ERS were similar to this new request and a short discussion of our experience with the ERS is appropriate.

The ERS attempted to automate the Correspondence Index in the DCI office. The system functioned properly, however, it was discontinued after an initial trial period. The reasons for the failure were:

- 1. Availability The terminals were connected to the ODP central service and the system was available approximately 90%. Requests for data in the ERS are not predictable and answers are needed in "Real Time". The 10% down time was unacceptable.
- 2. Indexing The success of the ERS is largely dependent upon the quality of the indexing. In the manual system, the key words are assigned by one person primarly for consistency. The automated ERS attempted to decentralize the function and the index was not built properly.

3. Conversion - The transition from a manual file to an automated one was extremely difficult. The people in the office are under constant pressure to respond to deadlines and there was little time for learning a new system. Additional people or extra hours are needed if a new system is tried again.

A mini-computer is an appropriate solution to ERS. This would solve the availability issue. The indexing and conversion difficulties need additional study. The automation of the Log of Contacts (Task #2) should preced any activity on the ERS. The same mini-computer could support both activities. After Task #2 is successfully implemented, the ERS can be restudied.

### C. Cost and Time Schedule

Initial costs:

REALITY computer \$100,000 Site preparation 15,000 Software development 20,000

Total initial costs

\$135,000

Time schedule:

Software development 5 months after procurement

ODP-908-77 13 May 1977

STATINTL

MEMORANDUM FOR:

Aide to Director of Central Intelligence

STATINTL

FROM

B Division, ODP

SUBJECT

: Project Proposal for TASK II

Attached is the Project Proposal covering the requirements, schedule, and costs for completing the work for TASK II.

Your concurrence is requested.

STATINTL

**CONCURRENCES:** 

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Date			
Date			

# PROJECT PROPOSAL FOR

## TASK II

- I. HISTORY
- II. REQUIREMENTS
- III. PROPOSED SYSTEM
- IV. DESIGN CONSIDERATIONS
- V. IMPACT
- VI. COST AND TIME ESTIMATES

### I. HISTORY

STATINTL

On Thursday, 7 April 1977, a meeting was held with Lt.

Aide to the Director of Central Intelligence.

The purpose of the meeting was to discuss methods for automating the appointment schedule of the DCI.

Several designs were discussed and some were implemented on the GTM II development system during the feasibility and analysis stage of this project.

#### II. REQUIREMENTS

The requirements for Task II are as follows:

- a. Provide a storage media for the data.
- b. Provide an update capability ADD, CHANGE, DELETE
- c. Provide daily, weekly, monthly, and long range schedule reports.
- d. Provide direct and ad-hoc queries on key words, subjects, and date-times.

Approximately fifteen transactions will enter the system per day. The date and time of the appointment must be edit-checked. All keywords must be compared against a table of acceptable values to minimize input errors.

All reports that deal with scheduling must be sorted by date and time of appointment. The reports must be made online and must be 79 columns in width or less. This restriction is due to the line length of the Texas Instruments

hard-copy unit attached to the Delta Data terminal. A classification header and trailer must appear on each page of the reports.

Input and update response should be 20 seconds or less.
All reports must be produced on-line in less than 10 minutes.

#### III. PROPOSED SYSTEM

The Automated Scheduling System will be implemented on the ODP GIM II system. Updates, queries and reports will be made on a Delta Data CRT terminal with Texas Instruments hard copy unit located in the customer's office.

When an appointment is made, a form containing date, time, subject, keywords, and schedules will be completed. The form will be given to a secretary to be entered into the scheduling system and saved in a hard file until the day after the appointment. Should the appointment change or be cancelled, the form in the hard file will be updated and changes made in the scheduling system.

The system will contain two files. The first will consist of a date, time, subject, keywords, schedules on which the appointment should appear, and flags for whether the schedule was tentative, a phone-call, or correspondence. The second file will contain all the keywords that are allowed for the keyword field in file one. When a keyword is entered in file one, it will be checked against all allowed keywords in file two. If the keyword is not present,

the operator will be allowed to add the new keyword. 10 to 20 new appointments will be added per day. File one will therefore contain about 4000 appointments at the end of one year. File two should contain less than 200 keywords.

All schedule reports will be generated by the GIM II report writer on-line. A hard-copy of the schedule will be produced on the TI hard-copy unit. All gueries required to produce the schedules will be stored in a GIM II procedure due to the complexity of the commands required to produce the reports. This will allow the user to produce a report by entering the name of the report and the dates required.

#### CONVERSION

The manual files now kept by the customer must be entered into the Scheduling System when the final design has been tested and accepted by the customer. There are approximately 300 items in the manual files.

#### IV. DESIGN CONSIDERATIONS

Task II will be designed so that all input and update procedures are similar to those in Task I. Common operating procedures will minimize the amount of training required by the customer.

User manuals and program documentation will also follow the format used in Task I.

#### V. IMPACT -

All hardware required for Task II has been installed and tested.

Customer impact will be minimal due to the similarity between Task I and Task II.

Impact of conversion on the customer is expected to be small. There are 300 actions to enter into the system which should take 4 to 6 hours, but we have allowed 16 hours for maximum flexibility. Since this is a small effort, we believe the customer can input this backlog of data.

VI.	COST AND TIME ESTIMATES			Man- power:	
		Hours	Target	Cost	Computers
a.	System Feasibility Analysis	80	13 May 77	1200	200
b.	GIM Monus/Dictionaries	24	17 May 77	360	300
c.	Report Programs	16	19 May 77	240	300
d.	Testing/Documentation	40	26 May 77	600	300
е.	Training	1.6	30 May 77	240	200
f.	User Acceptance		31 May 77		
	Historical Data Input	- 16		240	200
g.	HISCOLLOGIC Budge with the				3.5.00
				2880	1500
	Total Manpower Total Computer	Cost Cost	2880 1500		
	TOTA	Ĺ	4380		